

# Interagency Ecological Program Stakeholder Meeting

February 10, 2016

1:30-3:00pm

Dept. of Water Resources  
3500 Industrial Blvd, Rm 119  
West Sacramento, CA 95691



## Attendees:

Shawn Acuna, MWD  
Frances Brewster, SCVWD  
Brad Cavallo, Cramer FS  
Lori Chumney, CDFW  
Alison Collins, MWD  
Kelsey Cowin, SFCWA  
Steve Culberson, USFWS  
Matt Dekar, USFWS  
Linda Dorn, Regional San  
Gregg Erickson, CDFW  
Terry Erlewine, SWC  
Sakura Evans, CDFW  
Stephanie Fong, SFCWA  
Karen Gehrts, DWR  
Sheila Greene, WWD

Rosemary Hartman, CDFW  
Zac Jackson, USFWS  
Alejo Kraus-Polk, UC Davis  
Holly Long, SLDMWA  
Alice Low, CDFW  
Jonathan Nelson, CDFW  
Susan Ramos, WWD  
Alicia Seesholtz, DWR  
Stacy Sherman, CDFW  
Ted Sommer, DWR  
Stephani Spaar, DWR  
Vanessa Tobias, CDFW  
David Van Rijn, USBR  
Kim Webb, USFWS

Via Phone: Val Connor, SFWCA  
Sean Hayes DSP  
Lynda Smith, MWD  
Erwin Van Nieuwenhuyse, USBR

**Welcome, introductions, staffing updates, recap last stakeholder meeting, and consideration of agenda (David Van Rijn)**

- MWD - Alison Collins and Corey Phyllis are new staff at MWD
- CDFW –Vanessa Tobias is a new employee working with the IEP synthesis team

## IEP Updates (Gregg Erickson)

- 2015 was a busy year for IEP, and several documents were completed, including the Business Process Review (BPR) documents and the communication and engagement plan.
- We have scheduled four stakeholder meetings for 2016, an increase from the three annual meetings held previously.
- We have brought on an interim lead scientist, Sean Hayes, who will be focusing on the Science Agenda and outreach to Project Work Teams during his tenure with the IEP.
- 2016 will be focused on getting the science agenda going, updating the IEP MOU, completing additional BPR documents, advancing our Take permit applications, increased outreach to PWTs, and test driving the processes laid out in the Governance Framework.
- Overview of 2016 IEP Work Plan
  - It is important to remember that IEP is not an agency in itself; we integrate the decisions and actions of all nine member agencies and the work planning process is part of that collaboration. Furthermore, the IEP budget is a result of the work plan - the work plan is not developed from the budget. The work plan and budget are revised annually, and shared with the IEP Directors.
  - We begin each year sharing our priorities for that year, gathering input from stakeholders, and reaching out to the other programs. We specifically try to communicate with the regulatory units because IEP isn't regulatory.
  - We also try to find funds for PSPs in April-June, which allow us the IEP to do more outreach. In the last few years, all extra funds have been directed to drought and we have not done a PSP. New projects will be integrated into the 2017 work plan in the Fall of 2016.
  - When considering new projects for inclusion into the work plan, we try to look at everything at once, including Take. But, things do come in sideways sometimes. Above all, we try to facilitate good science by being flexible.
  - The 2016 work plan will be posted on the IEP website later this month. Please take a moment to review it and see if there are opportunities for collaboration. Going forward, we will try to get the work plans on the website by the end of January.
  - Work plans include an Introduction explaining the work plan development process, the organization of the work plan, and the priorities of the work plan.
  - For 2016, IEP has partnered with FRP, and that work is regularly shared at the Tidal Wetland PWT meetings. For drought, we have carried over everything from 2015. Drought monitoring doesn't necessarily go through the regular review processes, but we are trying to get them on the water and be flexible to support drought work. We will be adding some other monitoring activities, like eDNA, microcystis, and turbidity. Because of drought, there were no PSPs for 2015. Several mid-year adjustments for 2015 are continuing into 2016. Most recently, the Physical and Biological Drivers proposal (USGS) was approved for inclusion into the 2016 work plan, but is waiting for Take.
  - We will be meeting with the IEP Directors next month and will provide them an update on the 2016 work plan, as well as feedback from today's Stakeholder meeting.

- How PSP funding gets decided?
  - Agencies will bring forward funds for joint decision making, when available. That will usually get determined in the late spring or early summer, so it is during this time of the year when we are identifying those opportunities.
- The Water Action Plan for 2016 calls for a 3.5 year study for Delta Smelt monitoring. How does that fit into the IEP Work Plan?
  - Agencies would probably give the Directors a heads up in June 2016. Study proposals would be coming in to the IEP in the meantime, which will be shared with the Directors in September 2016. However, at this time, there are no specific studies relating to this on our radar.

#### **Update on SAIL Technical Team (Ted Sommer)**

- IEP has been working on improving synthesis over the last couple of years, and SAIL is an example of those efforts, looking at Salmon and Sturgeon. The SAIL team has conducted a fairly detailed review of the work being done over the last 10 years – both IEP and others. The SAIL team is led by Rachel Johnson (Salmon) and Joe Heublein (Sturgeon), both with NMFS. Contact either of them for more detailed information about SAIL.
- SAIL is focused on improving the management value of life stage monitoring through development of conceptual models by life stages and evaluation of existing monitoring.
- For winter-run:
  - Moving away from juvenile monitoring to detect presence and timing
  - Towards monitoring that can provide more quantitative data on: abundance, run identification (genetic ID in downstream locations), and condition at biological and management-relevant locations.
  - Evaluated current monitoring for the Salmon life stages in Upper River, Middle River (RBDD to Sacramento), Lower River (Tidal estuary to Ocean), Ocean.
- For Sturgeon:
  - Recommendations include monitoring recruitment and development of stage-based life cycle modeling.
- Process:
  - SAIL meets monthly; 1 year to-date.
  - Report progress at the SAIL at winter-run and Sturgeon PWTs as standing agenda items.
  - Manuscripts with group recommendations in-prep.
    - Draft to be shared with IEP PWTs (with stakeholder membership) for input; April 2016.
    - Some recommendations will be developed into proposals for implementation (e.g., genetic evaluation of Salmon at Sacramento and Chipps with recommended statistical methods to improve trawl efficiency estimates and thus abundance metrics) .
    - Manuscripts with monitoring recommendations to be submitted to peer-reviewed journal for additional peer review.

- Stakeholder input: Many water contractor technical staff regularly participate in the IEP PWTs. For example, Winter-run PWT membership includes Brad Cavallo, Sheila Greene, and Alison Collins. All winter-run and Sturgeon PWT members will be solicited for input in April 2016. If SAIL product review is a high priority, please encourage technical staff to engage in upcoming PWT efforts.
- What are the plans for SAIL in the coming years?
  - Not sure right now, but this is the current scope. The synthesis efforts are designed as short-term efforts. Going forward, it will depend on the recommendations and the feedback we get. The hope is it will lead to improved monitoring, but we also want an evaluation component.
- The reports will identify data gaps and ways to improve them, but what will it take to actually fill the data gaps (the effort), and will they answer those questions?
  - In some cases, it is improvements to the monitoring program. It's not necessarily that we need more money, but modifications to existing programs. But there may be recommendations for additional work.
  - With race identification, we have experience with processing those samples now and it will be easy to provide that service. But not sure if there will be that level of detail for all of the recommendations.
  - These are the logical next questions that managers will ask, and that information would help them put things into perspective. Lots of agencies need to start budgeting for that now for work a few years from now, and that insight would be helpful.
- What is the end goal? Were there a set of questions you had when beginning this process?
  - Don't think this is being driven by specific management questions. It was more a review of what information do we have available for these species, and where are the data gaps?
  - Part of the reason SAIL got developed is because of the MAST report for Delta Smelt, and the IEP Directors identified that as a valuable product and they requested we do one for Salmon/Sturgeon. So, it isn't really question-driven work, but rather, looking at what information we have, what we don't have, and where to go next.
  - There was a bit of Delta Smelt envy after that report, along with the refinement of the Delta Smelt Conceptual Model, and our ability to cover all the key life stages and spatial coverage. And, the Directors recognized we weren't there for Salmon, and definitely not for Sturgeon. It's just a black box for juveniles.

## **Updates from Public Water Agencies**

### Holly Long, SLDMWA

- SLDMWA's science focus is on topics that link back to water operations directly or indirectly. This includes fish populations (particularly listed ones), flow, and water quality.
- Specific science-related efforts:
  - Science underlying Biological Opinions for Delta Smelt and salmonids, pursued via CAMT.

- Fall-run Chinook and environmental conditions in the lower Klamath River, relating to release of fall flow augmentations from Trinity Reservoir for the benefit of Salmon. This is relevant because Trinity Reservoir is part of CVP.
- Delta conditions tracking, as they relate to fish populations, environmental conditions, and operations.
- Shasta flow and temperature management: interest in contributing to efforts to improve the accuracy of the reservoir temperature modeling, which is being pursued by the agencies. No specific project yet.
- Funding a project to compile all data pertaining to Winter-run Chinook spawning and juvenile production in the last few years and perform a retrospective synthesis report of factors affecting it. Report will be reviewed by a collaborative science panel in the Spring (still being planned).
- Scientific review of documents for public comment, such as WaterFix EIR/S; input to San Joaquin River Restoration Program annual tech memo group, which focuses on how to account for reintroduced Spring-run in salvage operations.

#### Shawn Acuna, MWD

- Vertical Distribution Habitat Study: It is currently in the IEP Work Plan and it is a study to evaluate factors that affect vertical distribution of Longfin Smelt. The surveys are scheduled for the Fall of 2016 and 2017. Data from this study will be used to validate the Deep Learning program identification of Longfin Smelt that was developed by Sureworks and funded by SFCWA.
- Salmon Predation Study: Funding from CDFW was awarded from the Predation Solicitation Program for some mesocosm studies in Liberty and Sherman Islands to measure predation rates of Striped Bass on Chinook Salmon and how the rates are affected by predator densities and habitat structure. Pilot study projected to be implemented in April 2016.
- Effective Population Study: The study is being validated by the Genomic Variation Laboratory at UC Davis. A final report and draft manuscript is expected by Spring/Summer 2016.

#### Stephanie Fong, SFCWA

- SFCWA's Research Plan <http://www.sfcwa.org/proposal-solicitation/sfcwa-priorities/> guides our science goals, and our preference is to solicit proposals through a Request for Proposal, but with a decreased budget in recent years, we've moved toward additional leveraging opportunities with other agencies. Categories of interest include:
  - Contaminants
  - Fish
  - Habitat Restoration
  - Modernizing monitoring
  - Nutrients
  - Phytoplankton
  - Use of the Estuaries Portal to promote data accessibility, reporting, and use
- Highlight's of our recent projects include:

- Cache Collaborative – four of the studies we funded under our 2014 RFP were food web studies in the Cache Slough Complex. The PIs from these projects meet quarterly with others doing research in the area to discuss ideas and findings. Meetings are open to the public, so interested parties should contact us to get on the notification list.
- Delta Smelt tagging – our 5<sup>th</sup> study funded under the RFP was to investigate the utility of a new, injectable tag. Results from this study acted as a springboard for a new study by MWD to determine the tag size necessary to minimally impact Smelt.
- Numerous nutrient-phytoplankton studies aimed at understanding mechanisms of primary productivity.
- Herbicide and insecticide studies to better understand changes in community composition in the presence of pesticides.
- Studies on thermal stresses on fish and stock density effects.
- In addition to funding specific projects, SFCWA has provided financial support for the development of the Estuaries Portal, Delta Regional Monitoring Program, and development of the Bay and Delta Nutrient Strategies, as well as technical staff support for efforts like IEP PWTs.

#### Sheila Greene, WWD

- Westlands Water District is a member of both the San Luis Delta Mendota Water Authority and the State and Federal Contracts Water Authority, therefore those presentations apply to Westlands.
- Westlands purchased land in the Delta for restoration opportunity. It is named Lower Yolo. An EIS is completed for restoration, baseline data has been collected, and a draft experimental design has been developed by Jon Burau (USGS). Unfortunately, due to the drought there are not funds to move forward on the restoration project.
- Westlands participates in the Collaborative Science and Adaptive Management Program (CSAMP). It was developed in response to litigation, but when the appeals courts reversed the district court decision, the participants to CSAMP agreed to continue the program. Prior to the launch of the Collaborative Adaptive Management Team (CAMT) under the CSAMP, made up of mid-level managers, the agencies implemented the South Delta Salmon Research Collaborative (SDSRC). Subsequently, the SDSRC was transferred to the CAMT as the Salmon Scoping Team (SST). A Workplan was developed by the CAMT for each of the Salmon and Delta Smelt scoping teams, with the goal of addressing the most contentious disagreements from the litigation. The Salmon Scoping Team has completed a draft of Workplan Element #1, and a synthesis of existing information and data on Salmon and identification of gaps in knowledge. A couple of the other, simpler, Workplan Elements were also completed, but there are other Elements that were contingent on the synthesis and gap report. One of the recommendations in the synthesis and gap report is development of a Long-Term Monitoring Plan. The CAMT SST will communicate with the IEP SAIL Team.
- Two requests from Sheila for follow-up:
  - For CDFW - Would like updates on winter-run adipose clip fish at a later date when the reports are read.

- For DWR – Would like the daily report on salvage to list the number of winter-run instead of all Chinook. Would also like the error checking done on a faster turn-around time.

### **Overview of the IEP Science Agenda, and Discussion (Matt Dekar)**

- As outlined in the IEP Governance Framework, the Science Agenda lies between the Strategic Plan and the Annual Work Plan, and connects the two. It is intended to define the near-term science needs and management actions to inform our annual work planning, and we are test driving it this year.
- We gathered a lot of input from various groups and used a conceptual model to organize our thoughts and the information we collected. We are tying all of the science priorities back to the management needs, so this is not intended to be a list of studies. There is no budget associated with it, and it is not a work plan or a laundry list. The focus is on the near-term management needs.
- Under the management drivers and mandates, why does it list only Steelhead recovery and not the recovery of any other species?
  - It's just meant to show how we are thinking about things; it is not an exhaustive list.
- We aren't going to be able to do this work alone, and communication, coordination, and avoiding redundancies will be key.
- The Governance Framework describes the Science Agenda as longer term process (3-5yrs), but the first round will cover a 2yr time frame.
- When we talk about the themes, those compartments are somewhat artificial. They are all interconnected, but we compartmentalized in order to work through everything. We identified 5 themes to focus on, and each theme asks two questions: What are the science needs for management, and what are the science tools needed?
  - Tools includes the synthesis of multiple tools coming together.
- What was the process for identifying science needs for management? Matt –
  - We solicited input from multiple groups, but they were different methods of solicitation. All of that information was compiled and it will link back to the sections in the Science Agenda and show how that input is informing the Science Agenda.
  - We also looked at plans and agendas from other groups, and we wanted to focus on things that we thought are actually feasible to accomplish in the next few years.
  - We are also working on a spreadsheet to be included as an appendix showing all of the input that was considered in the process of creating the Science Agenda. It was a comprehensive list and we pared that down to these five topics for this time frame. And for the next round of the Science Agenda, we are working toward a more methodical process for collecting input.
- Are you looking for input from us today?
  - Yes, we are always looking for input. It is probably too late for substantive changes from the stakeholders today, but input is always welcome.
  - We are interested in input on the content, but also on the process. It was our first attempt, so feedback on the process is welcome. A lot of the ranking was a struggle

for us, and that is more appropriate for the work plan, and suggestions on how to deal with that are appreciated.

- In your timeframe, do you also plan to get results?
  - Yes, somewhat.
- We will be briefing the IEP Directors next month, and asking for their feedback on this first draft. We would like to have the Science Agenda ready to inform our 2017 Work Plan, so we want to get input, process it, and use it to tweak things when we develop our 2017 Work Plan, and definitely have that input incorporated for the 2018 Work Plan. This year is a trial run. It'll be an on-going discussion.
- The Science Agenda can be used to inform long-term budgets, implementation, prioritizing special studies, outreach, identifying knowledge gaps, and improving collaboration and coordination.
- Is this compliance and discretionary money, or just discretionary money?
  - It's bigger than just discretionary money. It focuses on the larger regulatory needs and how best to meet those needs. It provides the broader information for management and expands beyond compliance monitoring. The focus is much broader than just funding. But if we had money for a PSP, we would design that PSP based on the Science Agenda.
- One of the management priorities should be "what can we do?" This is focused on understanding the system and how it works, but now what can we do to help the system work better?
  - There is an adaptive management discussion included in the Science Agenda, and the intent is that we can do something to make it better. When people are planning for funding, or someone is proposing a project, this helps to guide those actions.
  - We appreciate the point and want this to be focused on what we should study to help make management better. That is a very important thing to highlight. Remember, this isn't a work plan. But, when we build the work plan we need to show how that knowledge informs the work plan to help management.
  - Maybe this point needs more attention in the Science Agenda if that isn't coming through. We can revisit the Science Agenda to make sure it comes through more strongly.
  - We also start each section with the management questions/issues that we are working to address, and these are management-driven activities.

### **Wrap up (Dave Van Rijn)**

#### **Next IEP Stakeholder Meeting:**

May 11, 2016

1:30-3:00pm

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3500 Industrial Blvd, Rm 119, West Sacramento, CA 95691